## CLAIMS

- A connection structure between a coaxial connector and a multilayer board comprising:
  - a casing;
- a coaxial connector provided in this casing, and having a core wire;
- a multilayer board provided in the casing, and having a first signal line pattern;
- a transfer board provided in the casing located between this multilayer board and the coaxial connector, having a second signal line pattern, and formed so that the thickness of the transfer board is smaller than the thickness of the multilayer board;
- a connecting means for electrically connecting the core wire of the coaxial connector and the second signal line pattern; and
- a transmission line that electrically connects the first signal line pattern to the second signal line pattern, and suppresses an electromagnetic field distribution in an inward direction of the multilayer board.
- 2. A connection structure between a coaxial connector and a multilayer board comprising:
- a casing formed of an upper floor, a lower floor, and a sidewall adjacent to the upper floor;
  - a coaxial connector provided on the sidewall, and having

a core wire;

a multilayer board provided on the lower floor, and having a first signal line pattern;

a transfer board provided on the upper floor, and having a second signal line pattern;

a connecting means for electrically connecting the core wire of the coaxial connector and the second signal line pattern; and

a transmission line that electrically connects the first signal line pattern to the second signal line pattern, and suppresses an electromagnetic field distribution in an inward direction of the multilayer board.

- 3. A connection structure between a coaxial connector and a multilayer board according to Claim 1, wherein the transmission line is a coplanar-type transmission line.
- 4. A connection structure between a coaxial connector and a multilayer board according to Claim 2, wherein the transmission line is a coplanar-type transmission line.
- 5. A connection structure between a coaxial connector and a multilayer board according to Claim 1, wherein the multilayer board that has the first signal line pattern includes a microstripline-type transmission line or a coplanar-type transmission line.

- 6. A connection structure between a coaxial connector and a multilayer board according to Claim 2, wherein the multilayer board that has the first signal line pattern includes a microstripline-type transmission line or a coplanar-type transmission line.
- 7. A connection structure between a coaxial connector and a multilayer board according to Claim 1, wherein the transfer board has a second backside ground pattern, and this second backside ground pattern and the second signal line pattern are electrically connected by use of a via hole formed on the side of the multilayer board.
- 8. A connection structure between a coaxial connector and a multilayer board according to Claim 2, wherein the transfer board has a second backside ground pattern, and this second backside ground pattern and the second signal line pattern are electrically connected by use of a via hole formed on the side of the multilayer board.